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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

September 23, 1997

BY HAND DELIVERY

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Re: Opposition to Supplement to the Petition for Reconsideration
Granite Broadcasting Corporation
MM Docket No. 87-268

Dear Mr. Caton:

Enclosed for filing on behalf of Granite Broadcasting Corporation are an original and four (4) copies of an Opposition to the Supplement to the Petition for Reconsideration of the Sixth Report and Order filed by AK Media Group, Inc. in the above-referenced rulemaking proceeding. Please direct any questions concerning this matter to the undersigned.

Very truly yours,

Margaret L. Tobey, P.C.

Margaret L. Tobey, P.C.

Enclosures

Att. of Copies made
Oct 1, 1997

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

SEP 23 1997

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Advanced Television Systems)
and Their Impact Upon the) MM Docket No. 87-268
Existing Television Broadcast)
Service)

To: The Commission

**OPPOSITION TO THE SUPPLEMENT TO THE PETITION FOR
RECONSIDERATION SUBMITTED BY AK MEDIA GROUP, INC.**

I. INTRODUCTION

Granite Broadcasting Corporation and its wholly owned broadcasting subsidiaries ("Granite"),¹ by their attorneys, hereby submit this opposition to the Supplemental Petition for Reconsideration submitted by AK Media Group, Inc. ("AK Media") on August 22, 1997, in the above-captioned proceeding ("Supplement").²

¹ Since its founding in 1988, Granite Broadcasting Corporation has become the largest minority-controlled television group owner in the U.S. Directly and through subsidiaries, it owns and operates the following ten television stations: KNTV(TV), San Jose, California; WTVH-TV, Syracuse, New York; KSEE(TV), Fresno, California; WPTA(TV), Fort Wayne, Indiana; WEEK-TV, Peoria, Illinois; KBJR-TV, Duluth, Minnesota; KEYE, Austin, Texas; WWMT, Kalamazoo, Michigan; WKBW, Buffalo, New York, and WXON-TV, Detroit, Michigan.

² By Public Notice released September 2, 1997 (Report No. 2222), the Federal Communications Commission ("FCC" or "Commission") established September 23, 1997, as the deadline for filing oppositions to the supplements to the petitions for reconsideration filed on August 22, 1997.

II. DISCUSSION

AK Media is the licensee of Station KFTY(TV), Santa Rosa, California, which currently operates on NTSC channel 50 and was assigned DTV channel 54. Since Station KFTY(TV)'s DTV channel allotment is outside the Commission's proposed "core spectrum," Station KFTY(TV) may have to move its operations twice between now and 2006 as spectrum outside the core channels is recovered.³ To avoid the additional cost and uncertainty associated with a second move, AK Media proposes that the Commission change the DTV assignment for Station KFTY(TV) from channel 54 to channel 11.

Station KNTV(TV), San Jose, California (the "Station"), is owned and operated by a wholly owned subsidiary of Granite. The Station currently operates on NTSC channel 11 and has received a DTV allotment on channel 12. Although Granite understands AK Media's desire to receive a DTV channel assignment that is within the core spectrum,⁴ Granite must oppose AK Media's proposal because assigning Station KFTY(TV) to DTV channel 11 would cause impermissible interference to Station KNTV(TV)'s operations on NTSC Channel 11. AK Media acknowledges that "the station that would receive the most interference from KFTY at DTV channel 11 would be . . . Station KNTV(TV), San Jose, California."⁵ However, AK Media significantly underestimates this problem by asserting that only "minimal" interference would result from the proposed change in the DTV channel assignment.

³ See Supplement filed August 22, 1997.

⁴ Indeed, Granite faces similar circumstances in certain of its markets and has filed a Petition for Reconsideration requesting the Commission to rectify the inequity of requiring some, but not all, stations to relocate twice.

⁵ *Id.* at 3, n.3.

Specifically, AK Media predicts that the substitution of DTV channel 11 at an effective radiated power ("ERP") of 3.2 kW would cause an 8% increase in interference to Station KNTV(TV)'s NTSC channel 11 interference levels. AK Media calculates that this increased interference represents less than 5% of Station KNTV(TV)'s NTSC population coverage and that most of this interference "generally occurs in the higher elevations associated with Sonoma, Marin and Solano Counties in the northern part of the San Francisco Bay area."⁶ AK Media therefore concludes that its predicted 5% increase in additional interference "will meet the FCC's acceptable threshold."⁷

Granite objects to these statements and conclusions since its own engineering analysis of AK Media's proposed channel change demonstrates that more significant interference will result to Station KNTV(TV) than AK Media predicts.⁸ Specifically, Station KFTY(TV)'s Mt. Saint Helena NTSC site is 186.3 kilometers from Station KNTV(TV)'s site at Mt. Loma Prieta.⁹ As a result, substituting DTV channel 11 for Station KFTY(TV)'s current channel 54 DTV assignment would create a 87.3 kilometer short-spacing to Station KNTV(TV) and result in significant new interference to 452,968 persons and 1,661 square kilometers within KNTV(TV)'s Grade B contour.¹⁰ These figures represent new predicted interference to

⁶ See Supplement and attached Engineering Statement of Cohen, Dippell and Everist, P.C. ("Supplement Engineering Statement") at 2.

⁷ Id.

⁸ Granite's interference studies were performed pursuant to OET Bulletin No. 69 and Appendix B of Advanced Television Systems and Their Impact Upon The Existing Television Broadcasting Service, Sixth Report & Order, MM Docket No. 87-268, FCC 97-115 (released April 21, 1997) ("Sixth Report & Order").

⁹ See Engineering Statement of Hammett & Edison, Inc. attached hereto as Exhibit A ("Exhibit A") at 1.

¹⁰ Id.

9.2% of the population and 5.6% of the area within KNTV(TV)'s Grade B contour.

Contrary to AK Media's assertions, neither of these percentages can be construed as minimal or "de minimis." In fact, this level of interference is clearly prohibited by the Commission's rules. Paragraph 222 in the Sixth Report & Order explicitly states that the Commission will require a party requesting a modification of the DTV Table to show "that such modification would not result in any new predicted interference to other DTV allotments or existing NTSC stations." Furthermore, "any request for modification must include an engineering showing indicating that no new interference would be caused." Since even AK Media's overly optimistic interference prediction studies cannot meet this requirement, the Commission cannot grant AK Media's requested DTV channel substitution.

Moreover, AK Media's Supplement suggests that it could minimize any interference caused to Station KNTV(TV) by "using a directional pattern with more suppression towards the south."¹¹ Unfortunately, this technique is unlikely to minimize any resulting interference. The replication pattern for Station KFTY(TV) already significantly suppresses radiation towards Station KNTV(TV). Thus, the substitution of a directional antenna pattern, as suggested by AK Media, is unlikely to provide a solution to the instant interference problem.

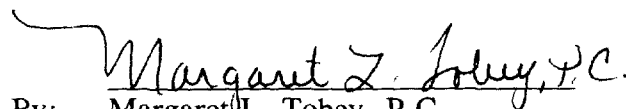
¹¹ See Supplement Engineering Statement at 2.

III. CONCLUSION

Contrary to the assertions of AK Media, the substitution of DTV channel 11 for Station KFTY(TV)'s channel 54 assignment would cause new interference to 9.2% of Station KNTV(TV)'s Grade B population and to 5.6% of the Station's Grade B area. This level of interference is unacceptable under the Commission's DTV rules and cannot be minimized by techniques such as the use of a directional antenna pattern. In light of the foregoing, the Commission must deny AK Media's request to change its DTV assignment from channel 54 to channel 11.

Respectfully submitted,

GRANITE BROADCASTING CORPORATION



By: Margaret L. Tobey, P.C.
Paige S. Anderson, Esq.
Its Attorneys

AKIN, GUMP, STRAUSS, HAUER &
FELD, L.L.P.
1333 New Hampshire Avenue, N.W.
Suite 400
Washington, D.C. 20036
(202) 887-4000

Date: September 23, 1997

EXHIBIT A

**TV Station KNTV
NTSC Channel 11
San Jose, California**

**Engineering Exhibit
in Support of Opposition to
Supplemental Petition for
Reconsideration**

September 22, 1997

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TV Station KNTV • NTSC Channel 11 • San Jose, California

Statement of Dane E. Ericksen, P.E., Consulting Engineer

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained by KNTV, Inc., licensee of TV Station KNTV, NTSC Channel 11, San Jose, California, to prepare an engineering exhibit in support of an Opposition to the August 22, 1997, Supplemental Petition for Reconsideration filed by AK Media Group, Inc.

AK Media/KFTY Proposal

AK Media Group, Inc. ("AK Media"), licensee of TV Station KFTY, NTSC Channel 50, Santa Rosa, California, proposes substitution of DTV Channel 11 for its DTV Channel 54 assignment from the Sixth Report and Order to MM Docket 87-268 ("Sixth R&O"). In its August 22 Supplemental Petition, AK Media claims that substitution of DTV Channel 11 with an effective radiated power ("ERP") of 3.2 kW would cause an increase of 8% to the existing KNTV NTSC Channel 11 interference levels, and also claims that this increased interference would still represent less than 5% of KNTV's NTSC coverage. AK Media then concludes that the Commission (and apparently KNTV) should accept this level of interference.

Proposed Substitution Would Cause Prohibited New Interference to KNTV NTSC Channel 11 Coverage

The KFTY Mt. Saint Helena NTSC site is 186.3 kilometers from the KNTV site at Mt. Loma Prieta. Substitution of DTV Channel 11 for DTV Channel 54 as the KFTY DTV channel would therefore create an 87.3-kilometer short-spacing to KNTV. As will be demonstrated, this proposal would cause significant new interference to KNTV.

Interference studies have been conducted pursuant to OET Bulletin No. 69 and Appendix B of the Sixth R&O with different results from those optimistically reported by AK Media. As shown by the attached Figure 1, use of DTV Channel 11 from the KFTY NTSC site with a center-of-radiation height of 1,358 m AMSL and 940 m HAAT, and using the KFTY replication pattern shown in Figure 2, with a main beam maximum ERP of 3.2 kW, would cause new interference to 452,968 persons and 1,661 square kilometers within the KNTV Grade B contour. This represents 9.2% of the KNTV Grade B population and 5.6% of the area within the KNTV Grade B contour. Neither of these percentages can be construed as "*de minimus*," let alone meet the criteria spelled out in Paragraph 222 of the Sixth R&O, namely that any changes to the DTV Table of Allotments adopted in the Sixth R&O will only be granted if they cause no additional interference to other stations.

TV Station KNTV • NTSC Channel 11 • San Jose, California

It should further be noted that the KFTY "replication pattern" already significantly suppresses radiation towards KNTV, so substitution of a directional antenna pattern as suggested by AK Media is unlikely to provide a solution.

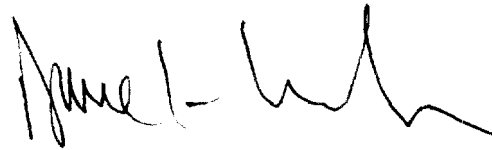
Summary

Contrary to the conclusion of AK Media that substitution of DTV Channel 11 for DTV Channel 54 as the KFTY DTV channel would cause no more than a 5% increase in interference, the proposed substitution would, by itself, cause new interference to 9.2% of the KNTV Grade B population and to 5.6% of the KNTV Grade B area.

List of Figures

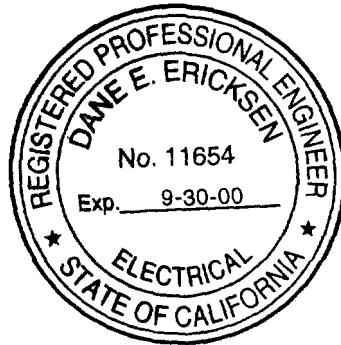
In carrying out these engineering studies, the following attached figures were prepared under my direct supervision:

1. Map showing KNTV interference cells for KFTY operating on DTV Channel 11
2. KFTY replication pattern used to predict interference to KNTV.



Dane E. Ericksen, P.E.

September 22, 1997



Affidavit


State of California

County of Sonoma

ss:

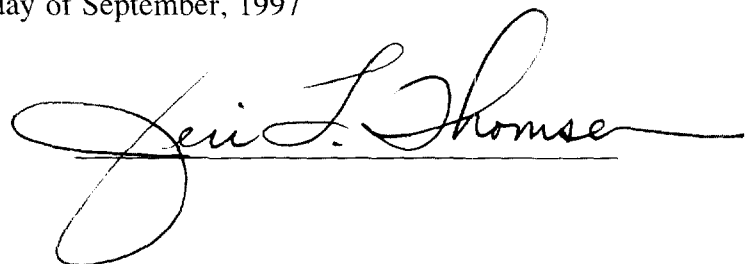
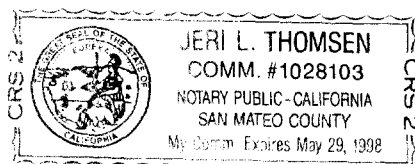
Dane E. Ericksen, being first duly sworn upon oath, deposes and says:

1. That he is a qualified Registered Professional Engineer, holds California Registration No. E-11654, which expires on September 30, 2000, and is employed by the firm of Hammett & Edison, Inc., Consulting Engineers, with offices located near the city of San Francisco, California,
2. That he graduated from California State University, Chico, in 1970, with a Bachelor of Science Degree in Electrical Engineering, was an employee of the Field Operations Bureau of the Federal Communications Commission from 1970 to 1982, with specialization in the areas of FM and television broadcast stations and cable television systems, and has been associated with the firm of Hammett & Edison, Inc., since October 1982,
3. That the firm of Hammett & Edison, Inc., Consulting Engineers, has been retained by KNTV, Inc., licensee of TV Station KNTV, NTSC Channel 11, San Jose, California, to prepare an engineering exhibit in support of an Opposition to the August 22, 1997, Supplemental Petition for Reconsideration filed by AK Media Group, Inc,
4. That such engineering work has been carried out by him or under his direction and that the results thereof are attached hereto and form a part of this affidavit, and
5. That the foregoing statement and the report regarding the aforementioned engineering work are true and correct of his own knowledge except such statements made therein on information and belief and, as to such statements, he believes them to be true.



Dane E. Ericksen, P.E.

Subscribed and sworn to before me this 22nd day of September, 1997

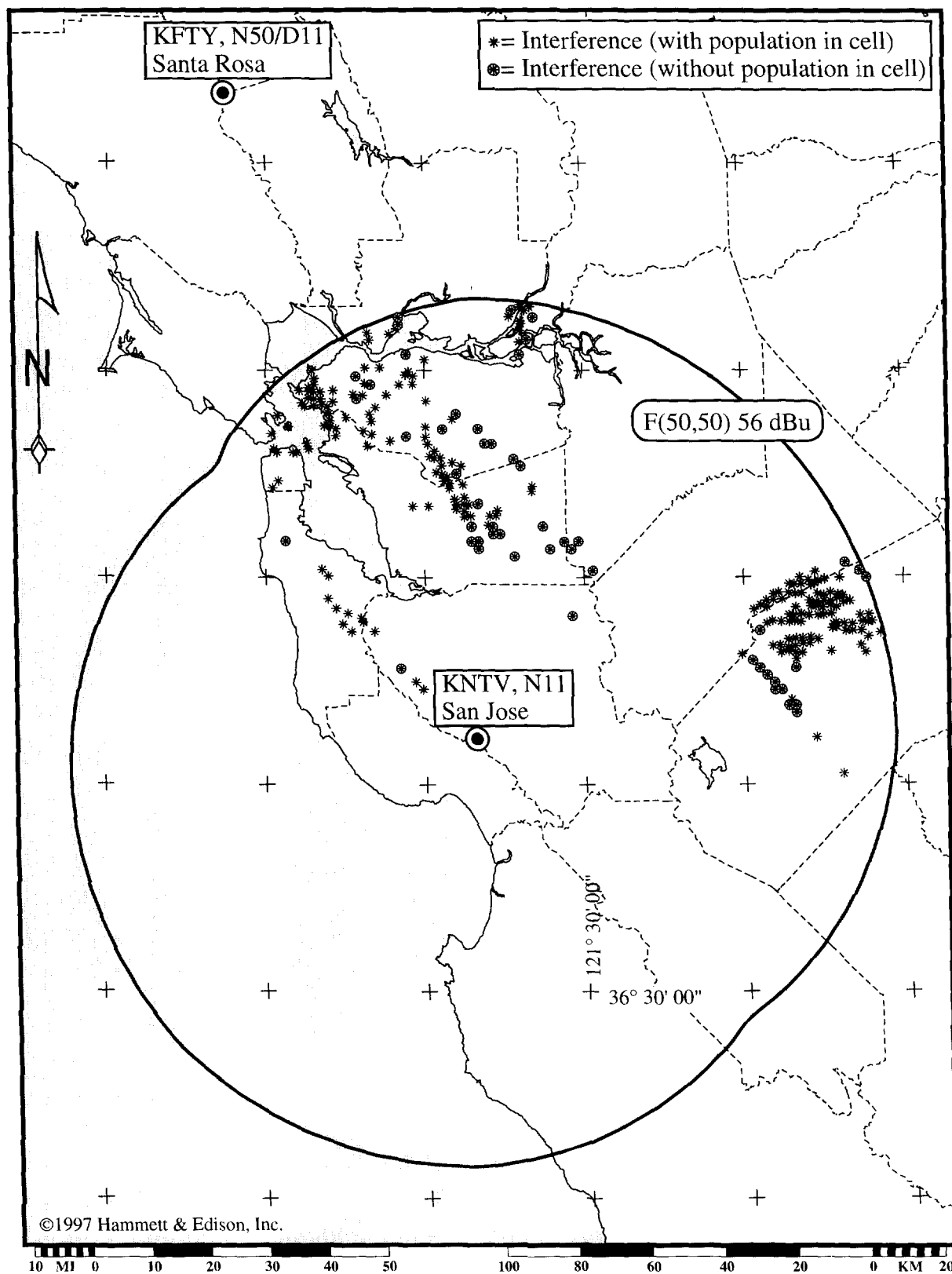


HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

970921
Affidavit

TV Station KNTV • NTSC Channel 11 • San Jose, California

Interference to KNTV, Channel N11, from KFTY Operating on Channel D11
Replication Pattern, 3.2 kW (DA) ERP, COR= 1,358 m AMSL, 940 m HAAT



HAMMETT & EDISON, INC.
CONSULTING ENGINEERS
SAN FRANCISCO

Geographic coordinate marks shown at 30-minute increments. Map data taken from Sectional Aeronautical Charts, published by the National Ocean Survey.

970921
Figure 1A

DTV.IXSTUDY™ Analysis Methodology

Implementation of FCC's Interference-Based Allocation Algorithm

On April 21, 1997, the Federal Communications Commission released its Sixth Report and Order to Mass Media Docket No. 87-268, establishing a final Table of Allotments for the transition from analog NTSC television service to a digital television ("DTV") service. The Commission utilized a complex set of computerized analysis tools to generate the DTV allotment table and added FCC Rules Section 73.623(b)(2), requiring that similar tools be employed to analyze individual DTV station assignments with regard to their potential interference to other DTV stations, DTV allotments, and existing or authorized NTSC facilities. Hammett & Edison has developed computer software to perform this function, based on an examination of the FCC software source code.

For any given NTSC or DTV station to be studied, the FCC analysis model first determines the location of the conventional F(50,50) Grade B contour of the NTSC station, or of the NTSC station associated with an assigned DTV station, using pattern information contained in the FCC engineering database and an assumed antenna elevation pattern. The model assumes that contour as an envelope, outside of which no protection from interference is implied or afforded. The location of the Grade B contour is also used to determine the assigned power for the DTV station, once again using conventional methods found in FCC Rules Section 73.699, Figures 9 and 10, but determining the power necessary on a radial basis to generate the associated DTV coverage contour (41 dBu for UHF, 36 dBu for high VHF Channels 7–13, and 28 dBu for low VHF Channels 2–6), for the assigned DTV channel. The maximum power determined using this method was assigned as the DTV operating power, provided it was calculated to be above established minimum power levels; otherwise, a minimum power level was assigned. Note that the use of this method usually creates a directional antenna pattern, even for DTV assignments to presently omnidirectional NTSC TV stations. The FCC requires that a DTV facility employ an antenna design that meets the calculated pattern, or that a nondirectional antenna be employed that does not exceed the directional pattern envelope in any direction, unless the creation of no new interference can be demonstrated.

In addition to the use of the Grade B envelope and an assumed directional transmitting antenna for all DTV facilities, the model assumes the use of directional receiving antennas at each studied location, or "cell." The characteristics of the receiving antennas are different not only for the low VHF, high VHF, and UHF frequency bands, but also for NTSC and DTV receiving situations, where, based on the FCC model, more directive antennas are employed for analysis of DTV reception.

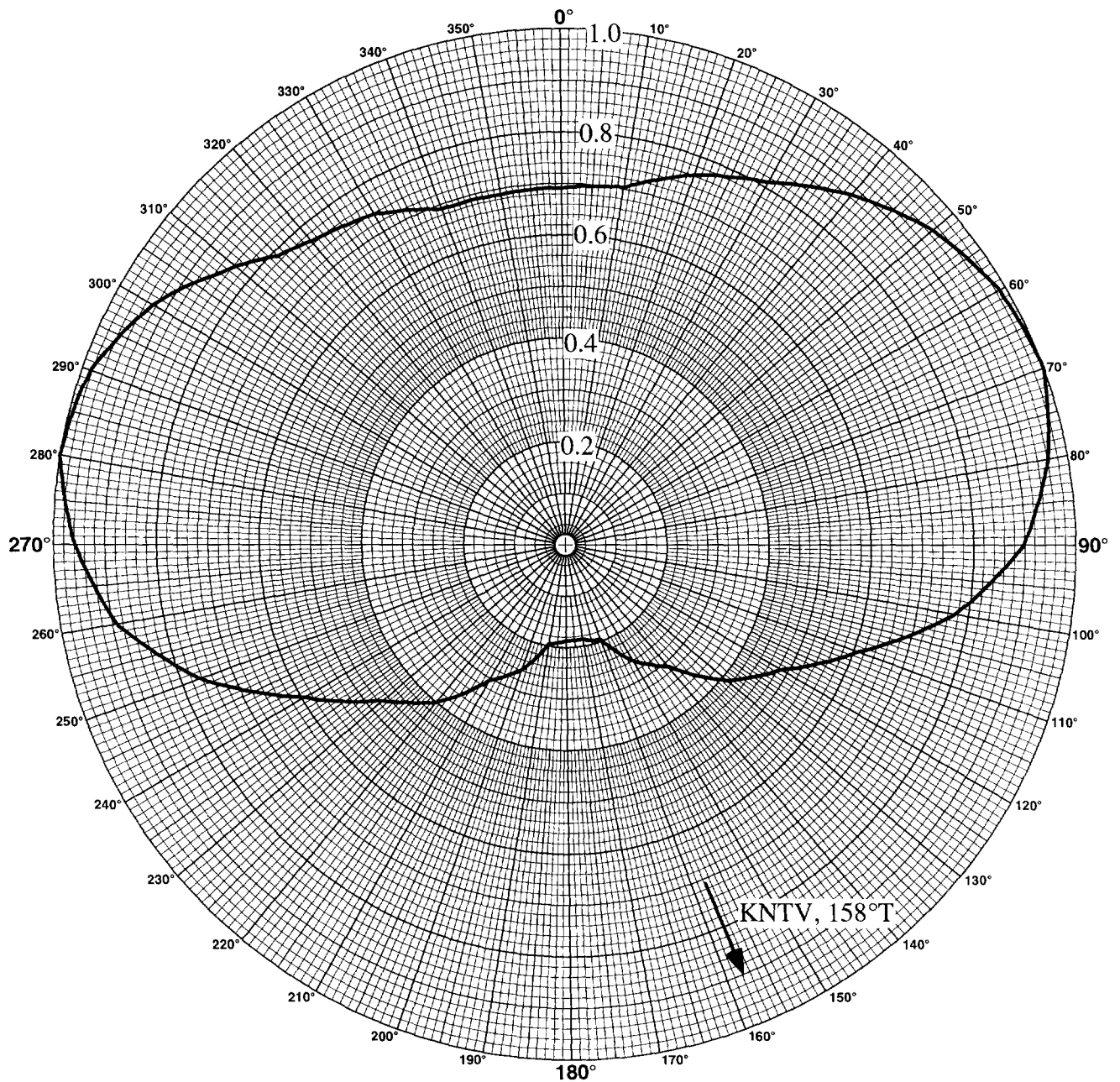
The FCC analysis technique employs terrain-sensitive calculation methods based on Version 1.2.2 of the ITS Irregular Terrain Model, also known as the Longley-Rice model. For each NTSC or DTV station to be studied, a grid of cells, two kilometers on a side, fills the associated Grade B contour. The program first determines which of the cells is predicted to receive service from the associated station, using Longley-Rice with F(50,50) statistical weighting for NTSC stations and F(50,90) statistical weighting for DTV stations. Cells determined to have no service are not studied for interference from other stations.* Once cells having service are determined, the software analyzes potential interference from other NTSC or DTV stations, again using the Longley-Rice propagation algorithm and F(50,10) statistical weighting for all potential interfering signals. Each cell is evaluated using the desired-to-undesired ratios presented in FCC Rules Section 73.623 for each channel relationship, and cells determined to have interference are flagged and summed with the study results of other cells, resulting in the generation of total interference area figures and tabulations of total population contained within the summed cells.

The Hammett & Edison analysis software program employs all of the analysis features described above, as well as several other more subtle elements employed in the FCC allotment program. Additionally, the Hammett & Edison program provides a graphical element that allows the identification of all interference cells on a map with an associated tabulation, and the program generates a DTV antenna pattern envelope that shows areas that can be maximized without creating interference in any cells that were not already receiving interference. The program can be used to test implementation scenarios that involve changes to antenna height, antenna pattern, channel number, and transmitter location. Additionally, the program has the capability to determine coverage areas of DTV and NTSC stations, with interference cells omitted. The Hammett & Edison program can also identify cells that fall in major bodies of water, based on digitized map data, summarizing those cells separately in an interference study or excluding them from a coverage study. Arguably, cells in water do not require protection from interference.

* It is noted that the Longley-Rice model is not always capable of determining, within certain confidence limits, whether a particular cell has service. In such cases, the Longley-Rice algorithm returns an error code; the FCC method for handling such error codes is to assume the associated cells have interference-free service, and as such, are not considered further. This assumption is presently being scrutinized by Hammett & Edison to determine its validity and to identify possible situations where significant actual interference areas may be overlooked from station studies.

TV Station KNTV • NTSC Channel 11 • San Jose, California


KFTY DTV Replication Pattern



CERTIFICATE OF SERVICE

I, Annamarie Valenti, an employee of Akin, Gump, Strauss, Hauer & Feld, L.L.P., certify that a copy of the foregoing Opposition to the Supplement to Petition for Reconsideration Submitted by AK Media Group, Inc. in MM Docket No. 87-268 was sent via First-Class U.S. mail, postage prepaid, on this 23rd day of September, 1997 to the following parties:

James L. Winston, Esq.
Steven J. Stone, Esq.
James P. Schultz, Esq.
Rubin, Winston, Diercks, Harris & Cooke, L.L.P
1333 New Hampshire Ave., N.W.
Suite 1000
Washington, D.C. 20036
Counsel for AK Media Group, Inc.


Annamarie Valenti